

M. J. Yox  
Regulatory Affairs Director  
Vogtle 3&4  
Nuclear Development

Southern Nuclear  
Operating Company, Inc.  
7825 River Road  
Waynesboro, Ga. 30830  
Tel: 706.437.6459



**AUG 31 2016**

Docket No.: 52-026

ND-16-1599  
10 CFR 52.99(c)(1)

U.S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555-0001

Southern Nuclear Operating Company  
Vogtle Electric Generating Plant Unit 4  
Completion of ITAAC 2.3.06.09b.i [Index Number 374]

Ladies and Gentlemen:

In accordance with 10 CFR 52.99(c)(1), this letter is to notify the Nuclear Regulatory Commission (NRC) of the completion of Vogtle Electric Generating Plant (VEGP) Unit 4 Inspections, Tests, Analyses and Acceptance Criteria (ITAAC) Item 2.3.06.09b.i [Index Number 374], for verifying that a report exists and concludes that the product of the overall heat transfer coefficient and the effective heat transfer area, UA, of each Normal Residual Heat Removal System (RNS) heat exchanger is greater than or equal to 2.2 million Btu/hr-°F. The closure process for this ITAAC is based on the guidance described in NEI 08-01, Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52, which was endorsed by the NRC in Regulatory Guide 1.215.

This letter contains no new NRC regulatory commitments. Southern Nuclear Operating Company (SNC) requests NRC staff confirmation of this determination and publication of the required notice in the Federal Register per 10 CFR 52.99.

If there are any questions, please contact David Woods at 706-848-6903.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Michael J. Yox".

Michael J. Yox  
Regulatory Affairs Director Vogtle 3&4

Enclosure: Vogtle Electric Generating Plant (VEGP) Unit 4  
Completion of ITAAC 2.3.06.09b.i [Index Number 374]

MJY/jyk/maa

To:

**Southern Nuclear Operating Company/ Georgia Power Company**

Mr. S. E. Kuczynski (w/o enclosures)  
Mr. D. A. Bost (w/o enclosures)  
Mr. M. D. Meier  
Mr. M. D. Rauckhorst (w/o enclosures)  
Mr. D. H. Jones (w/o enclosures)  
Ms. K. D. Fili  
Mr. D. L. McKinney  
Mr. B. H. Whitley  
Mr. D. L. Fulton  
Mr. C. E. Morrow  
Mr. M. J. Yox  
Mr. D. Woods  
Ms. A. L. Pugh  
Ms. K. Stacy  
Mr. J. J. Olson  
Mr. W. A. Sparkman  
Mr. J. P. Redd  
Mr. D. R. Culver  
Mr. F. Willis  
Document Services RTYPE: VND.LI.L06  
File AR.01.02.06

cc:

**Nuclear Regulatory Commission**

Ms. C. Haney (w/o enclosures)  
Mr. M. S. Delligatti (w/o enclosures)  
Ms. J. L. Dixon-Herrity (w/o enclosures)  
Mr. C. P. Patel  
Mr. B. M. Baval  
Ms. R. C. Reyes  
Ms. M. A. Sutton  
Mr. M. E. Ernstes  
Mr. G. J. Khouri  
Mr. M. G. Kowal  
Mr. J. D. Fuller  
Mr. T. E. Chandler  
Ms. S. E. Temple  
Ms. P. Braxton  
Mr. M. A. Junge  
Mr. T. Brimfield  
Mr. A. Lerch

**Oglethorpe Power Corporation**

Mr. M. W. Price  
Ms. K. T. Haynes  
Ms. A. Whaley

**Municipal Electric Authority of Georgia**

Mr. J. E. Fuller  
Mr. S. M. Jackson

**Dalton Utilities**

Mr. D. Cope

**WECTEC**

Ms. K. Stoner (w/o enclosures)  
Mr. C. A. Castell

**Westinghouse Electric Company, LLC**

Mr. R. Easterling (w/o enclosures)  
Mr. J. W. Crenshaw (w/o enclosures)  
Mr. L. Woodcock (w/o enclosures)  
Mr. C. Landon  
Mr. P. A. Russ  
Mr. M. Y. Shaqo  
Ms. S. DiTommaso  
Mr. A Dohse

**Other**

Mr. J. E. Hesler, *Bechtel Power Corporation*  
Ms. L. Matis, *Tetra Tech NUS, Inc.*  
Dr. W. R. Jacobs, Jr., Ph.D., *GDS Associates, Inc.*  
Mr. S. Roetger, *Georgia Public Service Commission*  
Ms. S. W. Kernizan, *Georgia Public Service Commission*  
Mr. K. C. Greene, *Troutman Sanders*  
Mr. S. Blanton, *Balch Bingham*

U.S. Nuclear Regulatory Commission  
ND-16-1599 Enclosure  
Page 1 of 3

**Southern Nuclear Operating Company  
ND-16-1599  
Enclosure**

**Vogtle Electric Generating Plant (VEGP) Unit 4  
Completion of ITAAC 2.3.06.09b.i [Index Number 374]**

### **ITAAC Statement**

#### **Design Commitment:**

9.b) The RNS provides heat removal from the reactor coolant during shutdown operations.

#### **Inspections, Tests, Analyses:**

i) Inspection will be performed for the existence of a report that determines the heat removal capability of the RNS heat exchangers.

#### **Acceptance Criteria:**

i) A report exists and concludes that the product of the overall heat transfer coefficient and the effective heat transfer area, UA, of each RNS heat exchanger is greater than or equal to 2.2 million Btu/hr-°F.

### **ITAAC Determination Basis**

Multiple ITAAC are performed to demonstrate that the Normal Residual Heat Removal System (RNS) provides the heat removal from the reactor coolant during shutdown operations. This ITAAC verifies the heat removal capability of the RNS heat exchangers, RNS-ME-01A and RNS-ME-01B.

A report exists and concludes that the acceptance criteria are met and that the product of the overall heat transfer coefficient and the effective heat transfer area, UA, for each RNS heat exchanger is greater than or equal to the value specified in the acceptance criteria as 2.2 million Btu/hr-°F.

The vendor validated that the RNS heat exchangers are capable of meeting the specified heat transfer performance requirements. AP1000 ME1C RNS Normal Residual Heat Removal Heat Exchanger Design Report (Reference 1), was generated identifying the heat exchangers' design and performance characteristics, including the overall heat transfer coefficient, U, and the effective heat transfer area, A, for each heat exchanger.

An inspection was performed of the AP1000 ME1C RNS Normal Residual Heat Removal Heat Exchanger Design Report (Reference 1). The purpose of the inspection was to confirm that the product of the overall heat transfer coefficient and the effective heat transfer area, UA, of each RNS heat exchanger was greater than or equal to 2.2 million Btu/hr-°F. The product of the overall heat transfer coefficient and the effective heat transfer area, UA, of each RNS heat exchanger was 3.044 million Btu/hr-°F.

The AP1000 ME1C RNS Normal Residual Heat Removal Heat Exchanger Design Report (Reference 1) exists and concludes that the product of the overall heat transfer coefficient and the effective heat transfer area, UA, of each RNS heat exchanger is greater than or equal to 2.2 million Btu/hr-°F.

### **ITAAC Finding Review**

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all ITAAC findings pertaining to the subject ITAAC and associated corrective actions. This review found that there are no relevant ITAAC findings associated with this ITAAC. The ITAAC completion review is documented in the Vogtle Unit 4 ITAAC Completion Package for ITAAC 2.3.06.09b.i (Reference 2) and available for NRC inspection.

### **ITAAC Completion Statement**

Based on the above information, SNC hereby notifies the NRC that ITAAC 2.3.06.09b.i was performed for VEGP Unit 4 and that the prescribed acceptance criteria are met.

Systems, structures, and components verified as part of this ITAAC are being maintained in their as-designed, ITAAC compliant condition in accordance with approved plant programs and procedures.

### **References (available for NRC inspection)**

1. APP-ME1C-VDR-001 Revision 0, AP1000 ME1C RNS Normal Residual Heat Removal Heat Exchanger Design Report
2. SVP\_SV0\_004114, Attachment 1, Submittal of Inspections, Tests, Analyses and Acceptance Criteria (ITAAC) Completion Package for Unit 4 ITAAC 2.3.06.09b.i [COL Index Number 374] (RNS Heat Exchangers Capacity)